wherein the pretreatment prevents binding of equine antibodies to those antigens common to all *Sarcocystis* spp. which can be present in the sample. This method is disclosed in Provisional Patent Application Serial No. 60/120,831, filed on February 19, 1999, now U.S. Serial No. 09/506,630, filed February 18, 2000, which is hereby incorporated herein by reference.--

In the Claims:

Please cancel Claim 31.

Please amend Claims 29, 30, 32, 33, 34, and 35 as follows.

-29-(Amended)

A method for producing an antibody against a *Sarcocystis neurona* antigen selected from the group consisting of a 16 ±4 kDa antigen and a 30 ±4 kDa antigen comprising:

(a) providing a microorganism containing a DNA encoding a fusion polypeptide in which a *Sarcocystis neurona* antigen selected from the group consisting of the 16 ±4 kDa antigen and the 30 ±4 kDa antigen is fused to a polypeptide which enables isolation of the fusion polypeptide by affinity chromatography;

(b) culturing the microorganism in a culture to produce the fusion polypeptide from the DNA;

(c) isolating the fusion polypeptide from the culture by affinity chromatography;

(d) admixing the fusion polypeptide isolated by the affinity chromatography with an adjuvant to produce an admixture;

(e) immunizing a mammal with the admixture containing the fusion polypeptide and the adjuvant which causes the mammal to produce antibodies against the fusion polypeptide; and

(f) removing serum from the immunized mammal and isolating the antibodies from the serum to produce the antibody against the *Sarcocystis neurona* antigen selected from the group consisting of the 16 ±4 kDa antigen and the 30 ±4 kDa antigen.

Sub C1

B4

-30- (Amended)

A method for producing a monoclonal antibody against a *Sarcocystis neurona* antigen selected from the group consisting of a 16 ±4 kDa antigen and a 30 ±4 kDa antigen comprising:

(a) providing a microorganism containing a DNA encoding a fusion polypeptide in which a *Sarcocystis neurona* antigen selected from the group consisting of the 16 ±4 kDa antigen and the 30 ±4 kDa antigen is fused to a polypeptide which enables isolation of the fusion polypeptide by affinity chromatography;

(b) culturing the microorganism in a culture to produce the fusion polypeptide from the DNA;

(c) isolating the fusion polypeptide from the culture by the affinity chromatography;

(d) admixing the fusion polypeptide isolated by the affinity chromatography with an adjuvant to produce an admixture;

(e) inoculating mice with the admixture containing the fusion polypeptide and the adjuvant which causes the mice to produce antibodies against the fusion polypeptide;

(f) removing the spleens from the mice which produce the antibodies against the fusion polypeptide;

(g) removing spleen cells from the spleens and mixing the spleen cells from the spleens with mouse myeloma cells to produce a mixture of fused cells consisting of spleen cells fused to myeloma cells, the spleen cells, and the myeloma cells;

(h) selecting the fused cells on cell culture medium in which the fused cells can grow but in which the spleen cells and the myeloma cells cannot grow; and

(i) screening the fused cells for fused cells which produce the monoclonal antibody against the *Sarcocystis neurona* antigen selected from the group consisting of the 16 ±4 kDa antigen and the 30 ±4 kDa antigen to produce the monoclonal antibody.

-32-(Amended)

The method of Claim 31 wherein the polypeptide comprising the fusion polypeptide is protein A and the affinity chromatography comprises an IgG-linked resin.

-33-(Amended)

Sub C2 B5

The method of Claim 31 wherein the polypeptide comprising the fusion polypeptide is polyhistidine and the affinity chromatography comprises a Ni^{2+} resin.

-34-(Amended)

The method of Claim 31 wherein the polypeptide comprising the fusion polypeptide is glutathione S-transferase and the affinity chromatography comprises a glutathione Sepharose 4B resin.

-35-(Amended)

The method of Claim 31 wherein the polypeptide comprising the fusion polypeptide is a maltose binding protein and the affinity chromatography comprises an amylose resin.